




Alloy samples from JP10-130754

Alloy #	Co	Sn	P	Zn	Mn	Mg	(Co-0.02)/P	Co+0.5P+0.9Sn+0.1Zn	Electrical Conductivity %ACS	Thermal Conductivity* cal/cm ² sec C	Tensile Strength N/mm ²	Elongation %
1	0.19	0.81	0.05	1.41			3.40	1.085	61	0.46	278	43
2	0.71	0.15	0.16	0.03			4.31	0.928	66	0.50	291	40
3	0.25	0.32	0.06	0.77			3.83	0.645	73	0.53	267	44
4	0.46	0.23	0.09	0.35			4.89	0.747	65	0.52	275	41
12	0.22	0.38	0.06	0.48	0.13		3.33	0.64	70	0.52	266	45
13	0.49	0.22	0.09	0.29	0.05	0.01	5.22	0.762	67	0.54	274	40
14	0.34	0.52	0.08	1.12		0.03	4.00	0.96	62	0.49	271	42
Range of present invention	0.15 - 0.33	0.02 - 0.25	0.041 - 0.089	0.01 - 0.40			2.4 - 5.2	0.2 - 0.54				

 = outside of claimed range

* Thermal conductivity was measured after the same heat treatment as the present invention; heated at 800C for 10 minutes and then cooled at 20C/min.